



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,210	02/17/2000	Hiroshi Maeda	49565(904)	6833

21874 7590 12/29/2003

EDWARDS & ANGELL, LLP

P.O. BOX 9169

BOSTON, MA 02209

EXAMINER

REITZ, KARL

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 12/29/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/506,210

Applicant(s)

MAEDA, HIROSHI

Examiner

Karl R. Reitz

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/17/00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The disclosure is objected to because of the following informalities: "it" should read "if" (page 43 line 8). Appropriate correction is required.

### *Drawings*

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference signs not mentioned in the description: 603a and 603b (figure 4). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference signs in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell (5,611,024) in view of Ishida (JP 4-88571).
6. In accordance with claim 1, Campbell discloses an image processing apparatus, namely a printer (col. 5 lines 64-66).

Art Unit: 2624

7. Campbell further discloses that the apparatus contains a storing section, namely the bit image memory 102 (figure 1). The storing section 102 stores image data that has been compressed and divided; in Campbell's system, the interpreter/rasterizer divides incoming image data into bands and compresses the bands (col. 7 lines 32-38), the bands are then stored in bit image memory 120 (col. 7 lines 40-42).

8. Campbell further discloses that his apparatus contains an image-processing section, which combines and decompresses stored image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) retrieves the stored data and decompressed it using decompression routine 106 (col. 6 lines 23-28). Campbell further discloses that the image-processing section carries out image processing on the image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) modifies stored image data after it has been decompressed (col. 6 lines 23-28). Campbell further discloses that the image-processing section then stores the image data that has been recompressed and divided; in Campbell's system, once the data has been appropriately modified, it is recompressed using the compression routine 104 and stored in bit image memory 102 (col. 6 lines 29-32). Campbell further discloses a judgment section, which makes a judgment as to whether or not an empty storing area in the storing section is sufficient for storing the processed image data; in Campbell's system, a determination of whether or not an empty storing area in the storing section is sufficient for storing the processed image data, is made in step 668 of the routine of figure 6C (col. 15 lines 23-25).

9. Campbell does not disclose expressly that if the judgment section determines that the empty storing area is insufficient, the image-processing control section allows

Art Unit: 2624

the processed image data to be stored in storing areas in which the stored image data was originally stored.

10. Ishida discloses overwriting new data on old base data (page 3 line 23).

11. Campbell and Ishida are combinable because they are from the same field of endeavor, namely image data compression/decompression in printing apparatuses.

12. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing control section of Campbell's system to overwrite newly processed data onto data that has already been processed, as described by Ishida, if it is determined by Campbell's judgment section that the storing area has insufficient memory for storing newly processed data.

13. The motivation for doing so would have been to allow the system to operate with smaller amounts of memory, as data which is no longer needed can be deleted.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Ishida in further view of Fall (5,991,515).

15. In accordance with claim 2, Campbell discloses that storing area is constituted by a plurality of blocks, which each store one divided portion of the image; in Campbell's system bit image memory 102, is divided into sections for working memory and compressed and decompressed band memory (col. 7 lines 11-14 and 26-27), each band corresponds to a memory block (col. 9 lines 5-7).

16. Campbell does not disclose expressly that if the judgment section determines that the storing area is sufficient for storing newly processed data, the image processing

Art Unit: 2624

control section preferentially stores the data in empty storing areas consisting of continuous blocks.

17. Fall discloses storing newly processed data in continuous blocks (col. 10 lines 53-54).

18. Campbell, Ishida, and Fall are combinable because they are from the same field of endeavor, namely image data compression/decompression in printing apparatuses.

19. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing control section of Campbell's system to store newly processed data in continuous storing areas, as described by Fall, if it is determined by Campbell's judgment section that the storing area has sufficient memory for storing newly processed data.

20. The motivation for doing so would have been to keep image data in order for processing and output to print engine.

21. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Takaoka (5,703,967).

22. In accordance with claim 3, Campbell discloses an image processing apparatus, namely a printer (col. 5 lines 64-66).

23. Campbell further discloses that the apparatus contains a storing section, namely the bit image memory 102 (figure 1). The storing section 102 stores image data that has been compressed and divided; in Campbell's system, the interpreter/rasterizer divides incoming image data into bands and compresses the bands (col. 7 lines 32-38), the bands are then stored in bit image memory 120 (col. 7 lines 40-42).

Art Unit: 2624

24. Campbell further discloses that his apparatus contains an image-processing section, which performs pre-processing on image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) receives image data and performs pre-processing by converting it into a rasterized bit image (col. 6 lines 17-20). Campbell further discloses that the image-processing section, then compresses and divides the image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) compresses the rasterized bit image using compression routine 104 (col. 6 lines 20-21). Campbell further discloses that the image-processing section, then stores the resulting image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) then stores the resulting image data in the bit image memory 102 (col. 6 lines 21-22). Campbell further discloses that the image-processing section, combines and decompresses stored image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) retrieves the stored data and decompressed it using decompression routine 106 (col. 6 lines 23-28). Campbell further discloses that the image-processing section carries out image processing on the image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) modifies stored image data after it has been decompressed (col. 6 lines 23-28). Campbell further discloses that the image-processing section then stores the image data that has been recompressed and divided; in Campbell's system, once the data has been appropriately modified, it is recompressed using the compression routine 104 and stored in bit image memory 102 (col. 6 lines 29-32).

25. Campbell does not disclose expressly that the apparatus includes a combining process for main image data and sub image data, and that the pre-processing include a

Art Unit: 2624

process for adding a blank section to the main image data, to which the sub image data is inserted.

26. Takaoka discloses processing an image to combining main image data and sub image data, and pre-processing an image to add a blank section to the main image data, to which the sub image data is inserted; in Takaoka's system, picture portions and character portions of an image are separated from each other (figure 10A shows the original image and 10B shows the character portion and 10C shows the picture portion col. 5 lines 65), and data corresponding to the picture portion on the image data of the character portion is replaced with blank data (col. 6 lines 38-40), each portions image data is transmitted are the picture data is added back to the character portion after transmission so the original document can be obtained (as shown in figure 11D col. 6 lines 21-22).

27. Campbell and Takaoka are combinable because they are from the same field of endeavor, namely image data compression/decompression in printing apparatuses.

28. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing control section of Campbell's system pre-process image data by adding a blank section to the main image data, and to process the image data by combining sub image data with main image data, as taught by Takaoka.

29. The motivation for doing so would have been to shorten the time required to transmit and process image data (Takaoka: col. 1 lines 45-50).

***Claim Rejections - 35 USC § 102***

30. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Campbell.



Art Unit: 2624

31. In accordance with claim 4, Campbell discloses an image processing apparatus, namely a printer (col. 5 lines 64-66).

32. Campbell further discloses that the apparatus contains a storing section, namely the bit image memory 102 (figure 1). The storing section 102 stores image data that has been compressed and divided; in Campbell's system, the interpreter/rasterizer divides incoming image data into bands and compresses the bands (col. 7 lines 32-36), the bands are then stored in bit image memory 120 (col. 7 lines 40-42).

33. Campbell further discloses that his apparatus contains an image-processing section, which combines and decompresses stored image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) retrieves the stored data and decompressed it using decompression routine 106 (col. 6 lines 23-28). Campbell further discloses that the image-processing section carries out image processing on the image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) modifies stored image data after it has been decompressed (col. 6 lines 23-28). Campbell further discloses that the image-processing section then stores the image data that has been recompressed and divided; in Campbell's system, once the data has been appropriately modified, it is recompressed using the compression routine 104 and stored in bit image memory 102 (col. 6 lines 29-32). Campbell further discloses a judgment section, which makes a judgment as to whether or not an empty storing area in the storing section is sufficient for storing the processed image data; in Campbell's system, a determination of whether or not an empty storing area in the storing section is sufficient for storing the processed image data, is made in step 668 of the routine of figure 6C (col. 15 lines 23-25).

Art Unit: 2624

Campbell further discloses that based upon the judgment by the judgment section, the image processing control section allows the processed data to be stored in the storing areas including the storing section; in Campbell's system, a determination of whether or not an empty storing area in the storing section is sufficient for storing the processed image data, is made in step 668 of the routine of figure 6C (col. 15 lines 23-25), if an empty area is available, if there is sufficient space, the data is written, if not a routine is executed to obtain an additional destination block for storing the data (col. 15 lines 21-27).

***Claim Rejections - 35 USC § 103***

34. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Ishida.

35. In accordance with claim 5, Campbell does not disclose expressly that if the judgment section determines that the empty storing area is insufficient, the image-processing control section allows the processed image data to be stored in storing areas in which the stored image data was originally stored.

36. Ishida discloses overwriting new data on old base data (page 3 line 23).

37. Campbell and Ishida are combinable for reasons already given above.

38. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing control section of Campbell's system to overwrite newly processed data onto data that has already been processed, as described by Ishida, if it is determined by Campbell's judgment section that the storing area has insufficient memory for storing newly processed data.

Art Unit: 2624

39. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Fall.

40. In accordance with claim 6, Campbell discloses that storing area is constituted by a plurality of blocks, which each store one divided portion of the image; in Campbell's system bit image memory 102, is divided into sections for working memory and compressed and decompressed band memory (col. 7 lines 11-14 and 26-27), each band corresponds to a memory block (col. 9 lines 5-7).

41. Campbell does not disclose expressly that if the judgment section determines that the storing area is sufficient for storing newly processed data, the image processing control section preferentially stores the data in empty storing areas consisting of continuous blocks.

42. Fall discloses storing newly processed data in continuous blocks (col. 10 lines 53-54).

43. Campbell and Fall are combinable for reasons already given above.

44. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing control section of Campbell's system to store newly processed data in continuous storing areas, as described by Fall, if it is determined by Campbell's judgment section that the storing area has sufficient memory for storing newly processed data.

45. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Ishida.

Art Unit: 2624

46. In accordance with claim 7, Campbell discloses an image processing apparatus, namely a printer (col. 5 lines 64-66). Campbell further discloses that the apparatus contains a image processing means, which carries out image processing on image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) modifies stored image data after it has been decompressed (col. 6 lines 23-28). Campbell further discloses that the image processing means compresses and divides the image data so as to be stored in a storing means in a divided manner; in Campbell's system, the interpreter/rasterizer 100 (figure 1) converts received image data into a rasterized bit image, compresses that rasterized bit image, and then stores the resulting data in bit image memory 102 (col. 6 lines 18-22), the image data for each page being stored divided, in multiple bands of memory (col. 7 lines 32-38). Campbell further discloses that the image processing means combines the divided and compressed image data, decompresses and restores them for output; in Campbell's system, the interpreter/rasterizer 100 (figure 1) decompresses the stored bit image (col. 6 lines 25-27), which is then sent to the print engine for printing (col. 6 lines 34-38).

47. Campbell further discloses a storing area managing means for managing a storing area of the storing means; in Campbell's system, the interpreter/rasterizer 100 (figure 1) stores compressed image data in the bit image memory 102 (col. 6 lines 18-22). Campbell further discloses that the managing means functions such that when the divided and compressed image data, which were stored in the storing means, have been restored and processed, the resulting data is again compressed and divided so as to be stored in the storing means; in Campbell's system, the interpreter/rasterizer 100

Art Unit: 2624

(figure 1) converts received image data into a rasterized bit image, compresses that rasterized bit image, and then stores the resulting data in bit image memory 102 (col. 6 lines 18-22), the image data for each page being stored divided, in multiple bands of memory (col. 7 lines 32-38), then the interpreter/rasterizer 100 (figure 1) modifies stored image data after it has been decompressed (col. 6 lines 23-28), the resulting data is then recompressed and again stored (col. 6 lines 29-32), the image data for each page being stored divided, in multiple bands of memory (col. 7 lines 32-38).

48. Campbell does not disclose expressly that the image data that has been redivided and recompressed after processing can be stored over the original image data.

49. Ishida discloses overwriting new data on old base data (page 3 line 23).

50. Campbell and Ishida are combinable because they are from the same field of endeavor, namely image data compression/decompression in printing apparatuses.

51. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing control section of Campbell's system to overwrite newly processed data onto data that has already been processed, as described by Ishida, the storing area has insufficient memory for storing newly processed data.

52. The motivation for doing so would have been to allow the system to operate with smaller amounts of memory, as data which is no longer needed can be deleted.

53. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Ishida.

Art Unit: 2624

54. In accordance with claim 8, Campbell discloses that the apparatus contains a judgment means for determining whether or not empty storing areas in the storing means are sufficient for storing divided and compressed image data after image processing; in Campbell's system, a determination of whether or not an empty storing area in the storing section is sufficient for storing the processed image data, is made in step 668 of the routine of figure 6C (col. 15 lines 23-25).

55. Campbell does not disclose expressly that if the judgment means determines that the empty storing area is insufficient, the storing area managing means allows the processed image data to be stored in storing areas in which the stored image data was originally stored, prior to processing.

56. Ishida discloses overwriting new data on old base data (page 3 line 23).

57. Campbell and Ishida are combinable for reasons given above.

58. Therefore, it would have been obvious to a person of ordinary skill in the art to allow storing area managing means of Campbell's system to overwrite newly processed data onto data that has already been processed, as described by Ishida, if it is determined by Campbell's judgment means that the storing area has insufficient memory for storing newly processed data.

59. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Ishida in further view of Fall.

60. In accordance with claim 9, Campbell discloses that the image data for each page is stored, divided, in multiple bands of memory (col. 7 lines 32-38)

Art Unit: 2624

61. Neither Campbell nor Ishida discloses that when storing the divided and compressed image data, the storing area managing means preferentially stores the data in continuous sections each corresponding to one divisional portion of the compressed image data (bands as described by Campbell col. 7 lines 32-38).
62. Fall discloses storing newly processed data in continuous blocks (col. 10 lines 53-54).
63. Campbell, Ishida, and Fall are combinable for reasons given above.
64. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the storing area managing means of Campbell's system to store newly processed data in continuous storing areas, as described by Fall, if it is determined by Campbell's judgment means that the storing area has sufficient memory for storing newly processed data.
65. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Takaoka in further view of Takemoto (5,841,547).
66. In accordance with claim 7, Campbell discloses an image processing apparatus, namely a printer (col. 5 lines 64-66). Campbell further discloses that the apparatus contains a image processing means, which carries out image processing on image data; in Campbell's system, the interpreter/rasterizer 100 (figure 1) modifies stored image data after it has been decompressed (col. 6 lines 23-28). Campbell further discloses that the image processing means compresses and divides the image data so as to be stored in a storing means in a divided manner; in Campbell's system, the interpreter/rasterizer 100 (figure 1) converts received image data into a rasterized bit

Art Unit: 2624

image, compresses that rasterized bit image, and then stores the resulting data in bit image memory 102 (col. 6 lines 18-22), the image data for each page being stored divided, in multiple bands of memory (col. 7 lines 32-38). Campbell further discloses that the image processing means combines the divided and compressed image data, decompresses and restores them for output; in Campbell's system, the interpreter/rasterizer 100 (figure 1) decompresses the stored bit image (col. 6 lines 25-27), which is then sent to the print engine for printing (col. 6 lines 34-38).

67. Campbell does not disclose expressly that when given instruction to process for a center binding edition or collecting images corresponding to a plurality of pages into one page, the apparatus carries out a pre-processing, which allows image data for combining to preliminarily possess a blank section to which image data to be combined is inserted prior to the compression, division and storage.

68. Takaoka discloses processing an image to combine main image data and sub image data, and pre-processing an image to add a blank section to the main image data, to which the sub image data is inserted; in Takaoka's system, picture portions and character portions of an image are separated from each other (figure 10A shows the original image and 10B shows the character portion and 10C shows the picture portion col. 5 lines 65), and data corresponding to the picture portion on the image data of the character portion is replaced with blank data (col. 6 lines 38-40), each portions image data is transmitted are the picture data is added back to the character portion after transmission so the original document can be obtained (as shown in figure 11D col. 6 lines 21-22).



Art Unit: 2624

69. Campbell and Takaoka are combinable because they are from the same field of endeavor, namely image data compression/decompression in printing apparatuses.

70. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing means of Campbell's system to pre-process image data by adding a blank section to the main image data, and to process the image data by combining sub image data with main image data, as taught by Takaoka.

71. The motivation for doing so would have been to shorten the time required to transmit and process image data (Takaoka: col. 1 lines 45-50).

72. Neither Campbell or Takaoka disclose that this process be executed in response to receiving instruction to process for a center binding edition or collecting images corresponding to a plurality of pages into one page.

73. Takemoto discloses allowing the user to input binding modes (col. 9 lines 62-64), including a center binding mode in which a plurality of page images are combined into one page (col. 8 lines 23-33).

74. Campbell, Takaoka and Takemoto are combinable because they are from the same field of endeavor, namely image data compression/decompression in printing apparatuses.

75. Therefore, it would have been obvious to a person of ordinary skill in the art to allow the image processing means of Campbell's system to pre-process image data by adding a blank section to the main image data, and to process the image data by combining sub image data with main image data, as taught by Takaoka, in response to

Art Unit: 2624

instruction to process for a center binding edition or collecting images corresponding to a plurality of pages into one page, as taught by Takemoto.

76. The motivation for doing so would have been to allow images to be center bound according to the user's preferences.

***Conclusion and Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl R. Reitz whose telephone number is (703) 305-8696. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (703) 305-7452. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

KRR



**DAVID MOORE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**